

# RECEIVED

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A Chrysanthemum Plant Named 'Cream Elite Reagan'

## RELATED CULTIVARS

'Cream Elite Reagan' is related to 'White Elite Reagan' and the copending application of 'Sunny Elite Reagan' (pending Serial No. 09/902,749). 'Cream Elite Reagan' and 'Sunny Elite reagan' are both natural mutants of 'White Elite Reagan',

## **BACKGROUND OF THE INVENTION**

'Cream Elite Reagan' is a product of a breeding and selection program that had the objective of finding color mutants of 'White Elite Reagan'. The new plant of the present invention comprises a new and distinct cultivar of chrysanthemum plant that is a natural occurring sport of a parent chrysanthemum named 'White Elite Reagan'. A comparison with parent chrysanthemum 'White Elite Reagan' is also made in this application. The new cultivar was discovered as a whole plant mutation in March, 1999 by Rob Noodelijk in a controlled environment (greenhouse) in Rijsenhout, Holland. The first act of asexual reproduction of 'Cream Elite Reagan' was accomplished when vegetative cuttings were taken from the initial selection in May, 1999 in Rijsenhout, Holland. The new cultivar has been found to retain its distinctive characteristics through successive propagations by cuttings.

## SUMMARY OF THE INVENTION

The present invention is a new and distinct variety of chrysanthemum bearing medium sized blooms with pale yellow ray-florets and yellow-green disc florets.

## BRIEF DESCRIPTION OF THE DRAWINGS

The present invention of a new and distinct variety of chrysanthemum is shown in the accompanying drawings, the color being as nearly true as possible with color photographs of this type.

- Fig. 1 shows a plant of the cultivar in full bloom.
- Fig. 2 shows the various stages of bloom of the new cultivar.
- Fig. 3 shows the foliage of the new cultivar.

#### DESCRIPTION OF THE INVENTION

This new variety of chrysanthemum is of the botanical classification *Chrysanthemum morifolium*. The observations and measurements were gathered from plants grown in April / May in a greenhouse in Rijsenhout, Holland in a photo-periodic controlled crop under conditions generally used in commercial practice. The greenhouse temperatures during this crop were at day-time between 18°C and 25°C and at night 20°C. After a long day period of 14 days, the photo-periodic response time in this crop was 48 days. After the long day period to flowering, growth retardants were applied 2 to 3 times in an average dose of 2.5 gram / liter water. No tests were done on disease or insect resistance or susceptibility. This new variety produces medium sized blooms with pale yellow ray-florets and yellow-green disc-florets blooming on the plant for 5 weeks. This new variety of chrysanthemum has been found to retain its distinctive characteristics throughout successive

propagations; however, the phenotype may vary significantly with variations in environment such as light intensity and temperature. To show the phenotype as described 'Cream Elite Reagan' can be planted without assimilation lightning (high pressure sodium lamps) between week 50 and week 40 of the next year under greenhouse conditions in Holland. With assimilation light (minimum level 2500 lux) it can be planted year round under greenhouse conditions in Holland.

From the cultivars known to inventor the most similar existing cultivar in comparison to 'Cream Elite Reagan' is 'White Elite Reagan' and 'Cream Reagan' (U.S. Plant Pat. 10,209). When 'White Elite Reagan' and 'Cream Elite Reagan' are being compared the following differences and similarities are noticed: The difference of 'White Elite Reagan' and 'Cream Elite Reagan' is the flower color for which characteristic 'Cream Elite Reagan' has been selected out of 'White Elite Reagan'. All other characteristics of 'White Elite Reagan' and 'Cream Elite Reagan' are similar. (The cultivar of this invention also distinguishes over the existing cultivar 'Yellow Cassa' (U.S. Plant Pat. 6,301) at least by the flower size and disc coloration).

The differences of 'Cream Elite Reagan' and 'Cream Reagan' are: (1) Disc flower color and size. The flower disc of 'Cream Elite Reagan' is more green and smaller. (2) Growth rate. The growth of 'Cream Elite Reagan' is more vigorous. (3) Response time. The response time of 'Cream Elite Reagan' is 4 to 5 days shorter.

The following is a description of the plant and characteristics that distinguish 'Cream Elite Reagan' as a new and distinct variety.

The color designations are taken from the plant itself. Accordingly, any discrepancies between the color designations and the colors depicted in the photographs are due to photographic tolerances. The color chart used in this description is: The Royal Horticultural Society Colour Chart, 1995 edition.

Table 1:Botanical Description of

CULTIVAR 'Cream Elite Reagan'

<u>Bud</u>

Size

Medium, cross-section 1.0 cm height 0.8 cm

Outside Color

Yellow 8 B

Involucral bracts

2 rows, length 7 mm, width 3 mm

Involucral bracts among-disc-florets

Not-present-

Involucral bracts color

Green 138 B

Bloom

Type

Single

Height

Low

Size

Medium to large

Fully Expanded

7.5 - 8.0 cm

Number of blooms per single stem

Average of 10-12

Seeds

Not produced

Performance (blooming period)

26-28 days

Fragrance

Typical chrysanthemum

Color

Center of the flower (disc-florets)

Immature yellow-green 144 B

Mature yellow-green 144 A

Color of upper surface of the majo-

Yellow 5 D

Yellow 2C

rity of the ray-florets

Color of the lower surface of the

majority of the ray-florets

Tonality from Distance

A spray mum with pale yellow flowers and a

yellow-green disc

Discoloration to color

Yellow 4 D

Ray florets

Texture

Upper and under side smooth

Number

22 - 24

Cross-section

Flat, sometimes convex

Longitudinal axis of majority

Straight, sometimes reflexing

Length of corolla tube

Very short to short

Ray-floret length

3.5 cm

Ray-floret width

1.2 cm

Ratio length / width

Low to medium

Shape of tip

Round sometimes dentate

Disc florets

Disc diameter

Medium, 1.0-1.2 cm

Distribution of disc florets

Numerous, clearly visible at all stages of

flowering

Shape

Tubular

Receptacle shape

Conical raised

Reproductive Organs

Stamen (present in disc florets only)

Yellow-green, thin 3 mm in length

Stamen color

Yellow-green 150 B

Pollen

Appears at a very late stage of flowering,

Pollen color

Close to Yellow 12 A

Styles (present in both ray and disc

Thin

florets)

Style color

Green 143 B

Style Length

4 mm

Stigmas

Yellow-green 144 A

Stigma Width

1 mm

Enclosed in calyx

<u>Plant</u>

Form

A spray mum meant for erect culture

Growth habit

Growth rate

Height

internodes

3.0 cm

Upright

Vigorous

100 - 125 cm

Spray formation

Corymbiform (funnel-shaped with a little

round to flat umbel on top)

Peduncle length

Near the top 14 cm, near the middle 23 cm,

near the bottom 30 cm

Peduncle color

Green 138 B

Peduncle, attachment

Good, not brittle

Peduncle, angle with stem

Small, 30°

Stem Color

Green 138 B

Stem Strength

Medium

Stem Brittleness

Absent

Stem Anthocyanin Coloration

Absent

Flowering Response(photo-periodic

48 days

controlled crop, not natural season)

5

**Foliage** 

Color

upper side 137 A

under side 147 B

Size

Medium; length 12 cm, width 8.5 - 9.0 cm.

Quantity (number per single stem)

22 - 28

Shape

-Ovate to oval - -

Texture upper side

Glabrous

Texture under side

Slightly pubescent

Venation arrangement

Pinnate

Shape of the margin

Lobed

Shape of Base of Sinus Between

Round

Lateral Lobes

Margin of Sinus Between Lateral

Parallel to diverging

Lobes

Shape of Base

Truncate

Apex

Mucronate

Table 2: Differences with the comparison Varieties

'Cream Elite Reagan'	'White Elite Reagan'	'Cream Reagan'
Yellow 5 D	White 155 D	Yellow 5 A
1.0 – 1.2 cm	1.0 – 1.2 cm	1.5- 2.0 cm
Yellow-green 144 B	Yellow-green 144 A	Yellow-green 151 C
Vigorous	Vigorous	Medium
30°	30°	30° - 35°
48	49	53 – 54
	Yellow 5 D 1.0 – 1.2 cm Yellow-green 144 B Vigorous 30°	Yellow 5 D White 155 D  1.0 – 1.2 cm 1.0 – 1.2 cm  Yellow-green 144 B Yellow-green 144 A  Vigorous Vigorous  30° 30°